L11 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1994:411925 CAPLUS
DN 121:11925
ED Entered STN: 09 Jul 1994
TI Cationic electrodeposition coating compositions
IN Sada, Toshihiko; Igarashi, Wataru; Fukui, Takeshi; Tsujimoto, Koshi; Kondo, Naoki
PA Nissan Motor, Japan; Shinto Paint Co Ltd
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C09D005-44
CC 42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06025567	A2	19940201	JP 1992-178364	19920706 <--
PRAI	JP 1992-178364		19920706		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 06025567	ICM	C09D005-44

AB The title compns. giving improved covering of cut edges of metal coated products and improved smoothness of coating films mainly comprise internally crosslinked acrylic resin fine particles with particle size 5-500 nm 1-20, thermoplastic resins 5-30, NH2-containing epoxy resins 40-70, and blocked isocyanate curing agent resins 10-35 parts. Thus, Bu acrylate 39, Bu methacrylate 39, styrene 20, and ethylene glycol dimethacrylate 2 parts were emulsion polymerized in water to give an acrylic resin emulsion (solid content 20%; average particle size 115 nm). Sep., 471 parts amino-contg epoxy resin (obtained by stirring bisphenol A epoxy resin with epoxy equiv 186 1116, bisphenol A epoxy resin with epoxy equiv 475 1900, diethylaminopropylamine 390, diethanolamine 378, and ethoxypropanol 1622 parts) was mixed with 257 parts blocked isocyanate solution [obtained by stirring TDI 522, MIBK 433, butoxyethanol 354, and trimethylolpropane 134 parts], 90 parts Nikanol G, 18 parts hexyl Cellosolve, 8 parts HCO2H, and water to give a resin solution, which was emulsified in the presence of HCO2H, then mixed with water, a pigment dispersion, and the acrylic resin emulsion to give a coating composition, which was applied to electrodeposition coating in a PVC container on a Zn phosphate-treated SPCC plate (as cathode) at 28°, then baked at 175° to give a 20-μm coating with good surface smoothness and corrosion resistance.
ST cationic electrodeposition coating corrosion resistant; acrylic resin cationic electrodeposition coating; thermoplastic resin cationic electrodeposition coating; epoxy resin aminated electrodeposition coating; isocyanate curing agent electrodeposition coating
IT Polyesters, uses
Polyketones
RL: USES (Uses)
(cationic electrodeposition coatings containing, with acrylic resins and aminated epoxy resins and blocked isocyanate curing agents)
IT Knives
(edges, cationic electrodeposition coatings on, acrylic resin blends as, corrosion-resistant, with good surface smoothness)
IT Urethane polymers, uses
RL: PREP (Preparation)
(preparation of, curing agents, for cationic electrodeposition coatings)
IT Electrodeposits and Electroplates
(anticorrosive, acrylic resin blends, with thermoplastic resins and aminated epoxy resins and blocked isocyanates)

IT Epoxy resins, preparation
RL: PREP (Preparation)
(reaction products, with diethylaminopropylamine and diethanolamine, preparation of, cationic electrodeposition coatings containing)
IT 9006-24-0, Nikanol G 25398-55-4, Halon 80 37337-82-9, Vylon 200
RL: USES (Uses)
(cationic electrodeposition coatings containing, with acrylic resins and aminated epoxy resins and blocked isocyanate curing agents)
IT 39462-15-2, SPCC, uses
RL: USES (Uses)
(cationic electrodeposition coatings on, acrylic resin blends as, corrosion-resistant, with good surface smoothness)
IT 104-78-9DP, reaction products with bisphenol A-based epoxy resins and diethanolamine 111-42-2DP, Diethanolamine, reaction products with bisphenol A-based epoxy resins and diethylaminopropylamine
RL: PREP (Preparation)
(preparation of, cationic electrodeposition coatings containing)
IT 102100-16-3P
RL: PREP (Preparation)
(preparation of, cationic electrodeposition coatings containing, with thermoplastic resins and aminated epoxy resins and blocked isocyanates)
IT 111-76-2DP, reaction products with TDI-trimethylolpropane copolymer 9017-09-8DP, TDI-trimethylolpropane copolymer, reaction products with butoxyethanol
RL: PREP (Preparation)
(preparation of, curing agents, for cationic electrodeposition coatings)
RN 9006-24-0
RN 25398-55-4
RN 37337-82-9
RN 39462-15-2
RN 104-78-9DP
RN 111-42-2DP
RN 102100-16-3P
RN 111-76-2DP
RN 9017-09-8DP

L11 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 1994-072118 [09] WPIX
DNC C1994-032805
TI Cationic electrostatic paint compsn. which prevents edge of steel plate from rusting - containing acryl resin fine particles, thermoplastic resin, amino gp-containing epoxy resin and blocked isocyanate curable resin..
DC A82 G02 M11
PA (NSMO) NISSAN MOTOR CO LTD; (SHID) SHINTO PAINT CO LTD
CYC 1
PI JP 06025567 A 19940201 (199409)* 8 C09D005-44 <--
ADT JP 06025567 A JP 1992-178364 19920706
PRAI JP 1992-178364 19920706
IC ICM C09D005-44
AB JP 06025567 A UPAB: 19940418
The compsn. comprises 1-20 pts. weight of (A) fine particles of an acrylic resin having internal crosslinking structure and particle dia. of 5-500mm; 5-30 pts. weight of (B) a thermoplastic resin; 40-70 pts. weight of (C) an amino gp-containing epoxy resin; and 10-35 pts. weight of (D) a blocked isocyanate curable resin as main components.
USE/ADVANTAGE - The compsn. prevents edge part of steel plate from rusting and provides evenness of coating film and good brightness when middle and top coating are conducted in the same conditions.
In an example, 471 pts. weight of an amino gp-containing epoxy resin, 257 pts. weight of a blocked isocyanate curing agent, 90 pts. weight of a thermoplastic xylene resin, 18 pts. weight of hexylcellosolve, 8 pts. weight of formic acid and 870 pts. weight of deionised water were mixed and diluted

with 2078 pts. weight of deionised water, then mixed with 528 pts. weight of a pigment dispersion and a microgel emulsion to prepare an electrostatic paint bath liquid The coating film with the liquid and a even surface and showed a good anticorrosive properties on the edge part of the coated article.
Dwg.0/0

FS CPI
FA AB
MC CPI: A04-F01A1; A05-A01E4; A08-R08B; A11-B05A; A12-B04C; A12-S09; G02-A05E; M11-G01

L11 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN
AN 1994-025567 JAPIO
TI CATIONIC ELECTRODEPOSITION COATING COMPOSITION
IN SADA TOSHIHIKO; IGARASHI WATARU; FUKUI TAKESHI; TSUJIMOTO KOSHI; KONDO NAOKI
PA NISSAN MOTOR CO LTD
SHINTO PAINT CO LTD
PI **JP 06025567** A 19940201 Heisei
AI JP 1992-178364 (JP04178364 Heisei) 19920706
PRAI JP 1992-178364 19920706
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1994
IC ICM C09D005-44
AB PURPOSE: To obtain a cationic electrodeposition coating composition improved both in covering properties at cut ends of metal-coated material and smoothness of electrodeposition coating film.
CONSTITUTION: This coating composition consists essentially of (A) 1-20 pts.weight acrylic resin fine particles having an internal crosslinking structure and 5-500nm particle diameter, (B) 5-30 pts.weight thermoplastic resin, (C) 40-70 pts.weight amino group-containing epoxy resin and (D) 10-35 pts.weight block isocyanate curing agent resin.

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